

Surfacing Roads.

In surfacing a road, the work should be well organized. The number of shovelers should be proportioned to the number of teams engaged, and the number of teams regulated by the distance of the haul, so that there may be little or no delay to teams or men by waiting. Beginning the work at the end of the section of road to be surfaced nearest to the source of the gravel, in this way each loaded team passes over the gravel already applied, and returning empty, does the same. This helps to build the road, especially if there is no road roller for this purpose. A man of skill should have charge of spreading the material, and the loads should be spread as they are dumped. In this way the material is evenly distributed.

Other means are sometimes employed for spreading the gravel by the use of a harrow or road machine after the material is all applied; but no amount of harrowing the surface with any tool will secure as good results as hand-spreading as each load is dumped. This gives not only even thickness, but an even compactness that cannot be secured by dumping loads one after another and simply leveling the surface.

We should know that we are building an artificial floor, which, when finished, should have an even surface, hard and smooth, without depressions where water may stand and materially damage the road. The material should not be spread over too great surface and should be well rounded up in the middle.

The greatest general fault with our roads is they do not shed water. A road when finished, and at all times should have sufficient grade from centre to side drains to readily carry off all surface water.

We should bear in mind that surfacing a road with broken stone, gravel or other road material, is but one step in the process of road building. The best of material, however well applied, does not build a road.

Street Dust.

Street dust, in its relation to health, is an important matter, but one which is commonly overlooked, except in so far as the clouds of dust rising on a windy day, create a temporary nuisance by filling the eyes or throat, covering the clothing, settling on exposed merchandise in front of stores, and blowing into houses through open windows or doors. It is the common experience of those who spend periods of the year away from the dust and smoke of towns, that there is almost entire free-

dom from colds and catarrhal affections, in spite of much exposure and hardship, such as is encountered by surveyors and explorers. A return to dusty and smoky surroundings is immediately accompanied by a returning of susceptibility to inflamed conditions of exposed mucous membranes.

Bronchial and lung diseases are exceedingly common among workmen exposed to dust, such as coal miners, coal haulers, firemen, foundry men, etc., all obliged to breathe into their lungs finely pulverised matter. While not itself a direct cause of disease, dust from such surroundings or from the street, irritates and brings about an inflamed condition of the delicate membranes of the eye, nose, throat and lungs, and this condition paves the way for infection with bacteria of disease, contained in the dust or otherwise encountered.

Street dust is a mixture of ingredients not pleasant to contemplate as blowing into the mouths of pedestrians on a windy day. Diseases which undoubtedly are communicated in this way include consumption, smallpox, diphtheria, whooping cough, measles and scarlet fever.

Even when not accompanied by bacteria, the inorganic particles of dust are a menace to health and every practicable means should be adopted to lessen the dust of towns and cities. Clean sidewalks and pavements should be adopted, and they should be kept clean; the throwing of waste into the streets, the accumulating of refuse in back yards, spitting in public places and smoke from factories are among the sources of dust to be considered, and for which suitable remedies should be found.

Road Machinery in Lanark County.

About a year ago the County Council of Lanark passed a by-law, with the consent of the local municipalities, under the provisions of the Ontario Act to aid in the Improvement of Highways, assuming 120 miles as county roads. The Carleton Place Central Canadian of a recent date says:—"Roadmaking is going on with great activity on the 11th line, Beckwith. The promoters hope to complete an up-to-date bit of work from the Franktown Road to Cram's cemetery this year. Our whole outfit is there—grader, crusher and roller, and on Wednesday they came in and hired our sprinkler and team of horses. The work is being done by the County Council. The town is taking great pride in the work, while the township is in ecstasy. The work is in charge of Mr. Duncan Hamilton."

From this report it is apparent that Lanark is soon to be a county of good roads. It is evident, too, that the County Council of Lanark, like all councils that undertake such work in a comprehensive way, have quickly come to the conclusion that modern implements, such as graders, crushers and rollers, are essential in the proper building of roads; that these implements are time and labor saving; that better and cheaper work can be done by their use; and, in fact, that little work of a satisfactory character can be done without them.

Hamilton and Bell Telephone.

The City of Hamilton, Ontario, have given the Bell Telephone Company an exclusive franchise for five years. The company is to pay \$1,450 on the execution of the agreement and \$2,900 a year for five years. The company agrees that it will not increase the rate charged the city or the Board of Education, the number of phones not to exceed 125. It also agrees to maintain and keep in repair without charge the poles and wires used in connection with the city police patrol system, and permit the city to use the cross-arm on every pole for the fire alarm wires. Provision is also made that as soon as the switchboard is in operation all subscribers will be supplied with long-distance instruments free of charge, and that all agreements to pay extra charges for these instruments shall cease on January 1, 1904. The rates are fixed at \$30 a year, unlimited calls for private residences; \$25 a year and 2 cents a call, measure service plan for private residences; \$20 a year, with an allowance of 100 calls each month, and 2 cents a call for all extra calls for dwelling houses, on a party line, not more than four on a line. The charges for offices or for houses used for trade, etc., \$45 a year for unlimited calls; on measured service plan \$25 a year and 2 cents a call; offices on party lines, \$35 a year with 100 calls a month, and 2 cents a call for all calls over 100 a month.

In the case of Galt vs. Bank of Montreal, His Honor Judge Jamieson has given his decision in favor of the plaintiff, confirming the claim of Galt that the marking of a cheque "good," by the bank, guaranteed as value.

"Children," asked the school commissioner, "what is political economy?" "Political economy," answered the precocious son of the district boss, is "getting men to vote for you as cheap as you can."